

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

### Freedom Plastics - Corporate

Idaho TechHelp

#### Freedom Plastics Improves On-Time Delivery

##### Client Profile:

Freedom Plastics is one of the nation's leading pipe and fittings manufacturers, with production facilities in Wisconsin, Florida, and Idaho. The Preston, Idaho facility, purchased in 2001, now has 35 employees.

##### Situation:

Freedom Plastics' Idaho facility had expertise in plastic pipe fabrication, a highly educated and motivated local workforce, and a low cost of doing business. However, operational costs were too high compared to economic returns. Although Preston was a logical site for additional expansion for Freedom Plastics, the site needed to meet two-day delivery deadlines to convert this opportunity into reality. To realize the Preston facility's potential and to protect 35 jobs, Freedom Plastics asked Idaho TechHelp (TechHelp), a NIST MEP network affiliate, to address key operational issues.

##### Solution:

First, TechHelp helped Freedom Plastics apply for and obtain Workforce Development Funds from Idaho's Department of Commerce. These funds were used to update the critical skills of the workforce in the areas of lean manufacturing, AutoCAD computer skills, and basic supervision. Then, in a program designed specifically to improve cycle-time, productivity, and on-time delivery, TechHelp led the entire company staff through introductory lean training. When a special order, which normally required five days to complete, was booked with a two-day delivery commitment, the work crew decided to try the lean methods they had just learned. They went from batch processing to individual processing for this order and completed it within eight hours. The experiment was repeated on other rush orders with very similar results. Despite these improvements, extensive overtime was still a feature of overall plant operations. TechHelp worked with Freedom Plastics employees to convert the entire factory from batch production to individual piece flow. TechHelp also created inventory kanbans to level the workflow throughout the process. The cycle time improved so dramatically that expected overtime was cancelled and the plant began requesting additional work from its corporate offices. Now all orders are shipped in less than the two-day cycle time requirement. Freedom Plastics is confident that the completion of its lean implementation will continue to improve productivity and create job stability at the plant.

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**Results:**

Reduced cycle time for expedited orders from 3 days to 8 hours.

Reduced cycle time for standard orders from 5 days to less than 2 days.

Retained 35 jobs.

**Testimonial:**

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